

OCR Computer Science A Level

1.2.4 Types of Programming Language

Flashcards



What are programming paradigms?



What are programming paradigms?

Different approaches to using a programming language to solve a problem.



Which two broad categories are programming paradigms split into?



Which two broad categories are programming paradigms split into?

- Imperative
- Declarative



State the advantages of procedural programming



State the advantages of procedural programming

- Can be applied to a wide range of problems.
- Relatively easy to write and interpret.



State a use of declarative programming



State a use of declarative programming

- Expert Systems/ Knowledge-based Systems.
- Artificial Intelligence.



Identify the four main programming structures used in structured programming



Identify the four main structures used in structured programming

- Sequence
- Selection
- Iteration
- Recursion



How does assembly language differ from machine code?



How does assembly language differ from machine code?

Assembly language uses mnemonics rather than binary. One line in assembly language is equal to one line in machine code.



What is the function of the STA mnemonic?



What is the function of the STA mnemonic?

Storing the value in the Accumulator at the given memory address.



What is the function of the BRP mnemonic?



What is the function of the BRP mnemonic?

Branches to a given address if the value in the Accumulator is positive. It is a conditional branch.



State the function of the opcode and operand



State the function of the opcode and operand

The opcode specifies the instruction to be performed and the addressing mode. The operand holds a value which is related to the data on which the instruction is to be performed.



State four addressing modes



State four addressing modes

- Immediate Addressing
- Direct Addressing
- Indirect Addressing
- Indexed Addressing



What is a class?



What is a class?

A template for an object that defines the state and behaviour of an object. An object is an instance of a class.



Give one disadvantage of Object
Oriented Languages



Give one disadvantage of Object Oriented Languages

- Requires a different style of thinking which can be difficult for programmers accustomed to other paradigms to pick up.
- OOP may not be suited to all types of problems.
- Generally unsuitable for smaller problems.

